

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant: Miguel ESTEVEZ et al.

Filed: Filed Concurrently Herewith

Title of Invention: METHOD OF CODING ARTEFACTS REDUCTION

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**PRELIMINARY AMENDMENT**

Assistant Commissioner for Patents  
Box Patent Application (35 U.S.C. 111)  
Washington, D.C. 20231

Sir:

Before the issuance of the first Office Action, please amend the above-identified application as follows:

**IN THE CLAIMS:**

Please amend claims 5, 6, 9, 10 and 13-16 by rewriting the same as follows:

5. (Amended) Method according to claim 2, **characterized in that** said deblocking filtering is performed separately for horizontal and vertical borders of neighbouring blocks.

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6. (Amended) Method according to claim 1, **characterized in that** said spatial filtering includes a deringing filtering, wherein the deringing filter operation decreases with an increasing image quality value (Q).
9. (Amended) Method according to claim 6, **characterized in that** said deringing filtering is a two dimensional filtering taking only neighbouring pixels of said pixel to be filtered into account which belong to a same region.
10. (Amended) Method according to claim 1, **characterized in that** the temporal filter operation decreases with an increasing image quality value (Q).
13. (Amended) Method according to claim 1, **characterized in that** said image quality value (Q) is determined based on a quantization scaling factor ( $M_{Quant}$ ) used for encoding the picture.
14. (Amended) Method according to claim 1, **characterized in that** said image quality value (Q) is determined based on a user selection.
15. (Amended) Method according to claim 1, **characterized in that** said discrete encoding/decoding of the picture is based on a discrete cosine transform.
16. (Amended) Method according to claim 1, **characterized in that** said discrete encoding/decoding of the picture is based on a MPEG coding scheme.

### REMARKS

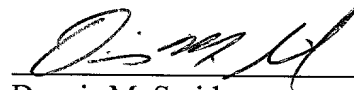
Claims 1-16 remain in the application. Claims 5, 6, 9, 10 and 13-16 have been amended to eliminate multiple dependencies. Attached hereto is a marked up version of the changes made to claims 5, 6, 9, 10 and 13-16 by the current amendment. The attached page is captioned

**“Version with markings to show changes made.”** The filing fee has been calculated based upon these amendments to the claims.

Respectfully submitted,

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**VERSION WITH MARKINGS TO SHOW CHANGE MADE****In the claims:**

5. (Amended) Method according to claim 2 ~~anyone of claims 2 to 4~~, **characterized in that** said deblocking filtering is performed separately for horizontal and vertical borders of neighbouring blocks.
6. (Amended) Method according to claim 1 ~~anyone of the preceding claims~~, **characterized in that** said spatial filtering includes a deringing filtering, wherein the deringing filter operation decreases with an increasing image quality value (Q).
9. (Amended) Method according to claim 6 ~~anyone of claims 6 to 8~~, **characterized in that** said deringing filtering is a two dimensional filtering taking only neighbouring pixels of said pixel to be filtered into ~~account~~ account which belong to a same region.
10. (Amended) Method according to claim 1 ~~anyone of the preceding claims~~, **characterized in that** the temporal filter operation decreases with an increasing image quality value (Q).
13. (Amended) Method according to claim 1 ~~anyone of the preceding claims~~, **characterized in that** said image quality value (Q) is determined based on a quantization scaling factor ( $M_{Quant}$ ) used for encoding the picture.
14. (Amended) Method according to claim 1 ~~anyone of the preceding claims~~, **characterized in that** said image quality value (Q) is determined based on a user selection.
15. (Amended) Method according to claim 1 ~~anyone of the preceding claims~~, **characterized in that** said discrete encoding/decoding of the picture is based on a ~~dierete~~ discrete cosine transform.

16. (Amended) Method according to claim 1 ~~anyone of the preceding claims~~, **characterized in that** said discrete encoding/decoding ~~decoding~~ of the picture is based on a MPEG coding scheme.

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